Sanjay Datta Chief Financial Officer Upstart Holdings, Inc. 2950 S. Delaware Street Suite 410 San Mate, California 94403 Re: Upstart Holdings, Inc. Annual Report on Form 10-K for the Fiscal Year Ended December 31, 2023 File Number 001-39797 Dear Sanjay Datta: We have reviewed your filing and have the following comments. Please respond to this letter within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. After reviewing your response to this letter, we may have additional comments. Annual Report on Form 10-K for the Fiscal Year Ended December 31, 2023 Our AI Lending Models, page 8 We note your disclosure that your AI models have increased in terms of 1. the number of variables, the number of total data points. We also note your discussion on page 90 that discusses the variable performances of different vintages of loans compared to the targeted performance rate. Please tell us, with a view towards revised disclosure, the factors that led lower than forecast performance for recent vintages, despite the access to additional data. Similarly, please tell us how you determined that loans originated in 2023, which would have the least seasoning, are expected to revert to target level performance. Our Ecosystem Value Proposition to Lending Partners and Instituitional Investors, page 11 We note that you permit your lending and institutional partners to 2. control their programs when originating loans through your platform. Please tell us, with a view towards August 13, 2024 Page 2 enhanced disclosure, the extent to which your lending partners rely on your credit scoring model alone, rather than in conjunction with traditional income and credit scores to approve loans. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. . Please contact Susan Block at 202-551-3210 or Christian Windsor at 202-551-3419 with any questions.

> Sincerely, Division of Office of Finance

Corporation Finance